

## REMARKS

### Introduction

Claims 1-17 are pending. Claims 1 and 11 are independent. Claims 1 and 11 have been amended. Claim 17 has been added.

### Rejections under 35 U.S.C. § 102(e)

Claims 1-16 stand rejected under 35 U.S.C. 102(e) as unpatentable over U.S. Patent Application Publication No. 2003/0078960 (Murren et al.).

Murren et al. describes a multi-layer software architecture for the construction of business processes and server-based software applications for various business domains. The architecture is arranged into several hierarchical layers. An execution environment layer handles incoming requests from remote clients and selects the appropriate problem-solving logic in a business logic layer to process the requests. A presentation layer structures the replies generated by the business logic layer into a desired appearance and encodes the replies using formats and communication protocols supported by different clients. Any one of the layers may be removed, modified, or updated without impacting other layers. The architecture supports a hierarchy of constraint layers, where each layer imposes different constraints on how the application might operate or how content may be presented to the user (see paragraph [0161]). A set of constraints (understood to mean limitations) are placed on various configuration parameters and application functions of the application.

In contrast to the architecture described by Murren et al., amended claim 1 of the present application recites, *inter alia*, defining a "data set structure" **which implements a Java-like interface** for use in both the business layer and the presentation layer, said "data set structure comprising hierarchical organizational information for data and functions"; populating

a business layer data set in said business layer according to said data set structure, said business layer data set comprising data and functions available for use in said business layer; and populating a presentation layer data set in said presentation layer according to said data set structure from said business layer data set, said presentation layer data set comprising data and functions available for use by the user in said presentation layer.

By way of the claimed invention, a data set structure **which implements a Java-like interface** is defined for use in both the business layer and the presentation layer, the data set structure includes hierarchical organizational information for data and functions business layer data is populated according to that information set in the business layer according to the data set structure. The claimed data set structure comprises hierarchical organizational information for data and functions.

Murren et al. does not describe a data set structure **which implements a Java-like interface**. As is known to those of skill in the art, a Java-like interface is a data structure which contains a set of unpopulated function signatures. A given class, in this case the data set structure, promises to implement or populate the member functions of the interface so that a call to an interface member function invokes underlying legitimate class code. Thus, both the business layer and the presentation layer as claimed by the present invention implement the same data set interfaces, and are thus flexible in that they share a common set of function signatures. They can pass data between each other that may change with updates to the software but not require changes to function signatures. A change in the business layer code does not require changes to the presentation layer signatures and vice versa. Murren et al. merely mentions that constraints (limitations) may be placed on functions and data, but does not specify that these constraints include **implementing a Java-like interface**.

Accordingly, applicant submits that Murren et al. does not describe, teach, or provide motivation for the invention recited by claim 1 of the present application, and withdrawal of the rejection of claim 1 under 35 U.S.C. 102(e) based on Murren et al. is requested.

Each of claims 2-10 ultimately depend from claim 1, that has been shown to be patentable, and is likewise deemed to be patentable, for at least the reasons described above with respect to the patentability of claim 1.

Amended claim 11, while different in scope from amended claim 1, recites an apparatus including features similar to those discussed above with respect to claim 1. For example, claim 11 recites an apparatus for use in a distributed data processing system comprising a data set **which implements a Java-like interface** for storing available data and identification of function calls, a presentation layer configured to store data and identification of function calls that are available for use by a user in accordance with said data set, and a business layer configured to store data and identification of function calls that are available for use by the presentation layer in accordance with the data set.

Accordingly, applicant submits that Murren et al. does not describe, teach, or provide motivation for the invention recited by claim 11 of the present application, and withdrawal of the rejection of claim 11 under 35 U.S.C. 102(e) based on Barry is requested.

Each of claims 12-16 ultimately depend from claim 11, that has been shown to be patentable, and is likewise deemed to be patentable, for at least the reasons described above with respect to the patentability of claim 11.

Thus, applicants submit that each of the claims of the present application are patentable over each of the references of record, either taken alone, or in any proposed

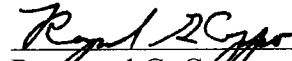
hypothetical combination. Accordingly, withdrawal of the rejections to the claims is respectfully requested.

**Conclusion**

In view of the above remarks, reconsideration and allowance of the present application is respectfully requested. No fee is believed to be due in connection with this Amendment. If, however, other fees are deemed necessary for this Amendment to be entered and considered by the Examiner, then the Commissioner is authorized to charge such fee to Deposit Account No. 50-1358. Applicant's undersigned patent agent may be reached by telephone at (973) 597-2500. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

Date: 3/9/07

  
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